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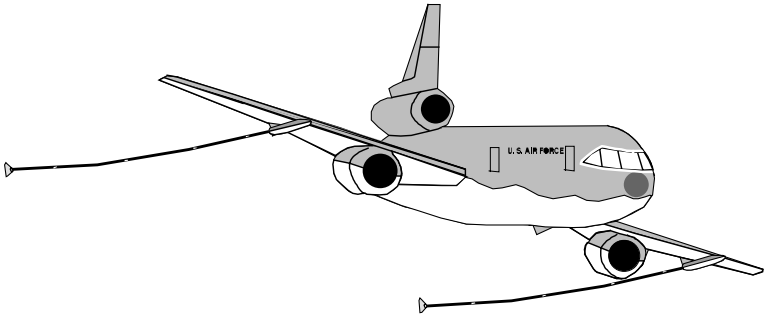
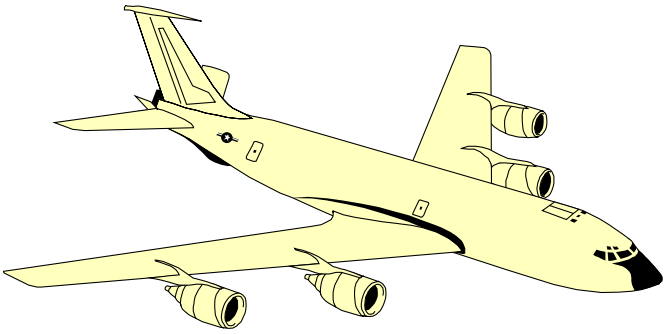
CFETP 1A0X1
Parts I-II
September 1999

AFSC 1A0X1
In-Flight Refueling Specialty
(Boom Operator)





CAREER FIELD
EDUCATION AND TRAINING PLAN

CAREER FIELD EDUCATION AND TRAINING PLAN
IN-FLIGHT REFUELING SPECIALTY
AFSC 1A0X1

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INFLIGHT REFUELING SPECIALTY
AFSC 1A0X1
CAREER FIELD EDUCATION AND TRAINING PLAN

Part I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instills rigor in all aspects of career field training.

2. The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, training, and other); Section D indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. Note: AFMAN 36-2108, *Airman Classification,* contains the specialty descriptions.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course, core task, and correspondence course requirements; Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements; Section C identifies available support materials. An example is a qualification training package (QTP) which may be developed to support proficiency training). QTPs identified in this section support upgrade/qualification training. These packages are identified in AFIND 8, *Numerical Index of Specialized Educational Training Publications*; Section D identifies a training course index which are used to determine resources available to support training. Included here are both mandatory and optional courses; Section E identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1A0X1 receive comprehensive and effective training at the appropriate phases of their career. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training. Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Air Force Career Field Manager (AFCFM). Individual appointed by Air Staff DCS's to manage education, training, and resources for a specific career field(s).

Air Reserve Component (ARC). Air National Guard and Air Force Reserve units.

Aircrew Training System (ATS). A comprehensive listing of tasks and objectives to be trained during formal training.

Basic Boom Operator Course (BBOC) A non-flying course designed to cover the fundamentals and applications of basic boom operator duties and responsibilities. This course awards AFSC 1A031.

Basic Qualification (BQ). A status of an aircrew member who has satisfactorily completed the basic training prescribed to maintain the skills necessary to fly on the unit aircraft. The member must perform at the minimum frequency necessary to meet the most recent sortie and flight standards set for that weapons system.

Boom Operator (BO). Common name given to the in-flight refueling career field

Career Development Course (CDC). A self-paced course designed to upgrade a skill level.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable to eliminate duplication, and to ensure this training is budget defensible.

Continuation Training (CT). Training for aircrew members already qualified in their respective aircrew position to maintain their assigned level of proficiency. CT is designed to progressively improve basic qualified, mission ready, mission capable, and aircrew members' ability to perform the units' mission.

Core Task. A task AFCFMs identify as a minimum qualification requirements within an Air Force specialty or duty position. These tasks exemplify the essence of the career field--the foundation. Failure to complete core tasks precludes upgrade. Core tasks not applicable to MAJCOMs are waiverable by MAJCOM functional managers.

Course Objective Lists (COL). A publication derived from our initial skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-skill level in this career field. Supervisors use the COL to conduct graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Military Training Programs*.

Enlisted Aircrew Undergraduate Course (EAUC). A course designed to screen candidates for the rigors of enlisted aircrew duties prior to spending expensive follow-on training resources.

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill-level of a specialty.

Evaluator Boom Operator. An instructor qualified boom operator selected from the most highly qualified and experienced instructors and designated in writing by the OG/CC or SQ/CC designated to administer evaluations.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Functional Manager. Individuals appointed by MAJCOMs to manage education, training, and resources for an Air Force Specialty. (MAJCOM Functional Manager, MFM)

Initial Qualification Training (IQT). Training necessary to initially qualify a crewmember in an MDS basic crew position and flying duties without regard to the unit's mission.

Initial Skills Training. Formal school courses that results in award of a 3-skill level AFSC. The BBOC is the initial skills course for AFSC 1A0X1.

Instructional Systems Development (ISD). A deliberate and orderly, but flexible process for planning, developing, validating, implementing and reviewing instructional programs. It ensures that personnel are taught, in a cost efficient way, the knowledge and skills for successful job performance.

Instructor Boom Operator. An individual authorized to instruct on those missions for which qualified.

Major Weapons Systems (MWS). All applicable airborne platforms with a crew complement including at least one 1A0X1.

Mission Capable (MC). A status of an aircrew member who has satisfactorily completed mission qualification training but who does not maintain mission ready status. Awaiting Air Staff review and resolution.

Mission Qualification Training (MQT). Training necessary to qualify a crewmember in a specific aircrew position to perform the command's or unit's operational mission. MQT completion is a prerequisite for mission ready status.

Mission Ready (MR). A status of an aircrew member who has satisfactorily completed qualification training prescribed to be fully qualified to perform the command's or unit's operational mission.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Practicum. OJT program for instructor or evaluator upgrade.

Qualification Training Package (QTP). An instructional course which includes IQT, MQT, and CT designed for use at the unit to qualify or aid qualification in a duty position, program, or on a piece of equipment.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being accomplished.

Specialized Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by the National Security Agency (NSA), and administered by qualified COMSEC maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge which an airman in that specialty may be expected to perform or to know on the job. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and exportable courses.

Standard. An exact value, a physical entity, or abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Subject Matter Expert (SME). An individual qualified in a particular specialty and who is consulted with for his or her subject matter expertise or knowledge of the specialty.

Syllabus. Published outline of training required to achieve the proficiency specified in the course training standards for a specific course. It prescribes the course content, instructions to conduct the training, and the approximate time necessary to successfully complete all requirements. A formal syllabus may be published to include IQT, MQT, CT and other aircrew training as determined by the training command, MAJCOM, or unit. (Formal and standardized syllabus are used primarily in AETC formal or developed courses.)

Total Force. All collective Air Force components (active, reserve, guard, and civilian elements) of the United States Air Force.

Upgrade Training (UGT). Training that leads to the award of a higher skill level in an Air Force Specialty.

Utilization and Training Workshop (U&TW). A forum of the AFCFM, MFM, SME, and AETC training personnel that determines career ladder training requirements.

War Task. Tasks that AFS functional managers identify as minimum qualification requirements trained at the in-resident wartime course.

Weapons System Training Package (WSTP). An instructional course (syllabus) which includes IQT, MQT, and CT designed for use at the unit to qualify or aid qualification in a duty position, program, or on a piece of equipment. The WSTP may be printed, computer based, flying, simulator, or other audiovisual material.

Section A - General Information

1. Purpose. This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and continuation training. Initial skills training is the Air Force Specialty specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Normally this training is conducted by AETC at a technical training center, or a Combat Crew Training School. For this career field, training is provided at Altus AFB, OK. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for awarding a 3-, 5-, 7-, or 9-skill level. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade process. It is designed to provide the performance skills/knowledge training required for the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or on-the-job training provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP also serves the following purposes:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to ensure that established training is provided at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommended training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and provides the training media.

1.4. Identifies major resource constraints which impact implementation of the desired career field training media.

2. Uses. Training managers will use this CFETP to ensure a comprehensive and cohesive training program is available and/or instituted for each individual in the career field.

2.1. AETC training personnel will develop/revise formal resident, non-resident, and exportable training based on requirements established by the user and documented in Part II of the CFETP. They will also work with the AFCFM to develop procurement/acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial skills and upgrade requirements. Identified requirements can be satisfied by resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

2.4. Qualification training packages (QTP) are developed by AETC, MAJCOM functional managers, and/or unit training managers. Provide unit-developed QTPs to the parent MAJCOM and include in the CFETP.

2.5. Personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623). All core tasks identified in this document are satisfied in IQT, MQT, and CT. That training is

certified via AF Form 8 by trained instructors and evaluators. Certification of the Form 8 eliminates the requirement to document STS items in this CFETP.

3. Coordination and Approval. The AFCFM is approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list in Part II, they will eliminate duplicate training. Applicable inputs/changes to this CFETP will be routed to HQ AETC/DOFM, 1F Street, Ste. 2 , Randolph AFB TX 78150-4325.

Section B - Career Progression and Information

4. Specialty Description.

4.1. **Specialty Summary.** Performs in-flight refueling aircrew functions and activities according to flight manuals, checklists, and Unites States Air Force publications. Related DoD Occupational Subgroup: 050.

4.2. **Duties and Responsibilities**.

4.2.1. Performs in-flight refueling aircrew duties. Checks forms for equipment status. Performs visual and operational check of air refueling and associated systems and equipment. Performs pre-flight, through-flight, and post-flight inspections. Accomplishes pre-flight and post-flight records and reports. Performs in-flight operational check of air refueling systems. Directs receiver aircraft into air refueling position. Operates in-flight boom controls and switches to safely affect contact between tanker and receiver aircraft. Monitors control panel for proper operation of equipment during air refueling, and advises receiver pilot of actions required to safely maintain position within the air refueling envelope. Keeps tanker pilot informed as to progress of air refueling operations. Performs emergency operations and procedures as required for emergency off-load and on-load of fuel. Preflights periscopic sextant, and assists navigator in making celestial observations.

4.2.2. Computes and applies weight and balance data, procedures, and techniques. Ascertains fuel, personnel, cargo, and emergency and special equipment weight and distribution to compute aircraft weight and balance. Ensures aircraft is properly loaded within safe operating limits, and applies weight and balance data in computing takeoff and landing data. Completes weight and balance forms for flight. Prepares loading plans, directs cargo loading, and inspects aircraft load to ensure weight and balance status of aircraft. Ensures adequate safety equipment and passenger comfort items are on aboard aircraft. Performs jumpmaster duties, and instructs passengers in use of emergency equipment and emergency procedures.

5. Skill/Career Progression.. Adequate training and timely progression from the apprentice to the superintendent skill level, plays an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that the trainee remain actively involved in the training process, and that all involved do their part to plan, develop, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at the appropriate points in their career. The following narrative and the AFSC 1A0X1 career field flow chart identify the training career path. They define the training required during an individual's career.

5.1. **Apprentice (3) Level.** Initial skills Upgrade training to the 5-skill training in this specialty consists of the tasks and knowledge training provided in the Basic Boom Operator Course (BBOC) located at Altus AFB OK. Completion of the Enlisted Aircrew Undergraduate Course (J3AQR1A011 000) at Sheppard AFB TX, is mandatory prior to entry into survival schools or the Basic Boom Operator Course. Initial skills training requirements were identified during the 1A0X1 utilization

and Training Workshop, held 17–18 March 1999 at Altus AFB OK. The decision to train specific tasks and knowledge items in the initial skills course was based on 1A0X1 subject matter expert (SME) inputs and was approved by Functional Managers from the MAJCOMs in attendance. Task and knowledge training requirements are identified in the specialty training standard, Part II, sections A and B. Individual must complete the initial skills course BBOC to be awarded the 3-skill level, AFSC 1A031. Upon completion of initial skills training, individuals will attend either the KC-135 Boom Operator Initial Qualification Course at Altus AFB OK or the KC-10 Boom Operator Initial Qualification Course at Travis AFB CA or McGuire AFB NJ. After weapon systems qualification training is complete, a trainee will work with a trainer to enhance their knowledge and skills. They will utilize the Career Development Course and Task Qualification Training and other exportable courses to progress in the career field. Once task certified, a trainee may perform the task unsupervised.

5.2. **Journeyman (5) Level.** Upgrade training to the 5-skill level in this specialty consists of (1) completing three months apprenticeship period before being entered into upgrade training (TBD ARC), (2) completing the Career Development Course (CDC) 1A051, (3) completing all core tasks identified in the CFETP and other duty position tasks identified by the supervisor, (4) completing a minimum of 15 months in 5-level OJT, (minimum of 6 months for retrainees), (5) meet mandatory requirements listed in specialty description in AFMAN 36-2108 (Airman Classification) and CFETP, and (6) be recommended by supervisor. Once upgraded to the 5-level, a journeyman will enter into continuation training to broaden their experience base. Five-levels may be assigned job positions within the squadron and unit. Five-levels should complete all available courses, and MAJCOM specific training. Individuals will attend the Airman Leadership School (ALS) after having 48 months in the Air Force. A Journeyman can expect to fill various positions within the unit. If they are instructor qualified, they may be used as an instructor in training flight, certified as an evaluator, and may also be assigned to work in staff positions. Individuals will use their CDC's to prepare for testing under WAPS. They should also consider continuing their education toward a CCAF degree.

5.3. **Craftsman (7) Level.** Upgrade training to the 7-skill level in this specialty consists (1) completion of all 5/7-skill level training requirements identified in the STS of this CFETP, (2) be a SSgt select or above, and (3) complete a minimum of 18 months in 7-level OJT training (minimum of 6 months for retrainees). A craftsman can expect to fill various supervisory and management positions such as flight supervisor, section supervisor, and if instructor qualified, a flight instructor/evaluator, and task certifier. They will also be assigned to work in staff positions. Seven-levels should take courses or obtain added knowledge on management of resources and personnel. They should continued academic education through CCAF and completing higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will attend the Noncommissioned Officer Academy in residence course.

5.4. **Superintendent (9) Level.** Entry into 9-skill level training is initiated when an individual possesses the 7-skill level, completes the Senior NCO Academy (in-residence course for active duty personnel, in-residence/correspondence course for ARC personnel), and sews on SMSgt. 9-skill level individuals can be expected to fill positions such as flight chief, operations superintendent, program manager, and various staff NCOIC jobs. Additional training areas should include budget, manpower, resources and personnel management. Additional personal and professional growth and development should be pursued through continuing education. Individuals promoted to SMSgt will attend the USAF Senior Noncommissioned Officer Academy or one of the other service senior enlisted academies. Additional education and completion of professional courses outside of their career AFSC are also recommended.

5.5. **Chief Enlisted Manager (CEM).** CEM code is awarded upon promotion to Chief Master Sergeant. In addition to performing duties normally associated with the flying aspects of the AFSC, the chief enlisted manager is directly responsible for the management and supervision of all enlisted

personnel training and utilization within their specialty code and/or directorate of responsibility. As the CEM, they direct performance standardization, qualification, skills training, professional development and enrichment, mentoring, and utilization of enlisted personnel. They also perform evaluations of individual and group performance in terms of effectiveness, efficiency, in accordance with Air Force, MAJCOM, and unit instructions and mission requirements. Interprets and discusses findings with senior staff and recommends action to correct deficiencies. They direct day-to-day operations and activities of personnel within their directorate, resolves technical problems encountered during mission operations, and advises organizational senior leadership and staff agencies on status of activities and issues effecting mission accomplishment. Additionally, CEMs perform staff functions where aircrew operational expertise is required. Additional education and completion of professional development courses outside of their career AFSC are also recommended and encouraged. CEM coded individuals can be expected to fill positions such as squadron superintendent, operations group superintendent, section chief, detachment chief, PME school commandant functional managers and various senior staff positions.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the In-flight Refueling career field. This CFETP was developed to include life-cycle-training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. The following decisions were made at the career field U&TW held at *Altus AFB, OK, 17-18 March 1999.*

6.1. **Initial Skills Training.** The course for awarding the AFSC 3-skill level, was changed from completion of the KC-135BIQ to completion of the Basic Boom Operator Course. The STS for the 3-skill level was revised to provide initial skills training during the BBOC. These skills will provide the foundation for specialty related duties which will be further developed during their aircraft initial qualification training course for either the KC-10 or KC-135 aircraft.

6.2. **Five Level Upgrade Training.** No formal changes. CDC Proficiency codes reviewed to ensure training continuity with BBOC 3-skill level codes.

6.3. **Seven Level Upgrade Training.** No formal changes.

6.4. **Proficiency Training.** No formal changes.

7. Community College of the Air Force. Enrollment in CCAF occurs upon completion of basic military training. Off duty education is a personal choice, but highly encouraged. CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree. Contact the local education officer for more current course information. In addition to its associate degree program, CCAF offers the following:

7.1. **Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2. **Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.3. **Degree Requirements:** All airmen are automatically entered into the CCAF program. The 5 skill level must be held at the time of program completion. The following degree requirements come from the 1999-2001 CCAF Catalog for the Aviation Operations (4VCB) degree:

Subject Area	***Semester Hours***
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Total	**64**

7.3.1. **Technical Education (24 Semester Hours):** Twenty-four semester hours are required to fulfill the technical education requirement. Twelve semester hours must be applied from technical core course with the remaining 12 applied from either technical core or technical elective course. Requests to substitute subjects/courses must be approved in advance by the Technical Branch at CCAF.

7.3.1.1. **Technical Core (12-24 Semester Hours):**

Subjects/Courses	***Max Semester Hours***
Air Refueling Operations	18
Air Transportation Principles	6
Aviation/Flight Safety	6
CCAF Internship	16
Flight Rules and Regulations	3
Introduction to Aeronautics	3
Survival Training	6

7.3.1.2. **Technical Electives (0-12 Semester Hours).**

Subjects/Courses	***Max Semester Hours***
Aerodynamics	3
Aircraft Systems	6
Aircraft Weight and Balance	3
Aviation Law	6
Climatology/Meteorology	6
Private/Commercial Pilot's License	3
Computer Science	6
Electricity/Electronics	6
Enlisted Professional Military Education	12
Flight Physiology	3
General Chemistry/Algebra-Based Physics	4
Human Relations	3

7.3.2. **Leadership, Management, and Military Studies (6 Semester Hours):** Professional military education and/or civilian management courses.

7.3.3. **Physical Education (4 Semester Hours):** This requirement is satisfied by completion of Basic Military Training. PHE 1000.

7.3.4. **General Education (15 Semester Hours):** Applicable courses must meet the criteria for application of courses to the General Education Requirement (GER) and be in agreement with the definitions of applicable general education subject/courses as provided in the CCAF general catalog.

Subject/Courses	***Semester Hours***
Oral Communication (speech)	3
Written Communication (English composition)	3
Mathematics (intermediate algebra or college-level mathematics)	3
Social Science (anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology)	3
Humanities (courses in fine arts(criticism, appreciation, historical significance, foreign language, literature, philosophy, religion)	3

7.3.5. **Program Elective (15 Semester Hours):** Satisfied with applicable technical education; leadership, management, and military studies; or general education subjects/courses, including natural science courses meeting GER application criteria and foreign language credit earned at the Defense Language Institute or through the Defense Language Proficiency Test. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied.

7.4. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associates degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Flow Charts.

Figure 1 - Enlisted Education and Training Path

Figure 2 - 1A0X1 Career Path 1 of 2

Figure 3 - 1A0X1 Career Path 2 of 2

Figure 4. 1A0X1 Assignment Locations

Enlisted Career Path

Education and Training Requirements	GRADE REQUIREMENTS				
	Rank	Earliest Sew-on	Air Force Average Sew-on	1A0X1 Average Sew-on	High Year of Tenure (HYT)
Basic Military Training School					
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months			
Upgrade To Journeyman (5-Skill Level) - Complete 3 months duty position and apprentice experience before beginning journeyman training. - Minimum 15 months on-the-job training. - Complete appropriate CDC.	SrA	28 months	3 years	3 years	10 years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).					
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt select - 18 months OJT - Formal advanced skill training. - Must be 7-skill level for TSgt sew-on.	SSgt	3 years	6.7 years	7.7 years	20 years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	5 years 8 years	13.9 years 16.4 years	13.1 years 15.3 years	20 years 24 years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt selectee. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	11 years	19.1 years	21.1 years	26 years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	14 years	21.7 years	22.5 years	30 years
Data current as of April 1999					

Figure 1

1A0X1 Career Path 1 of 2

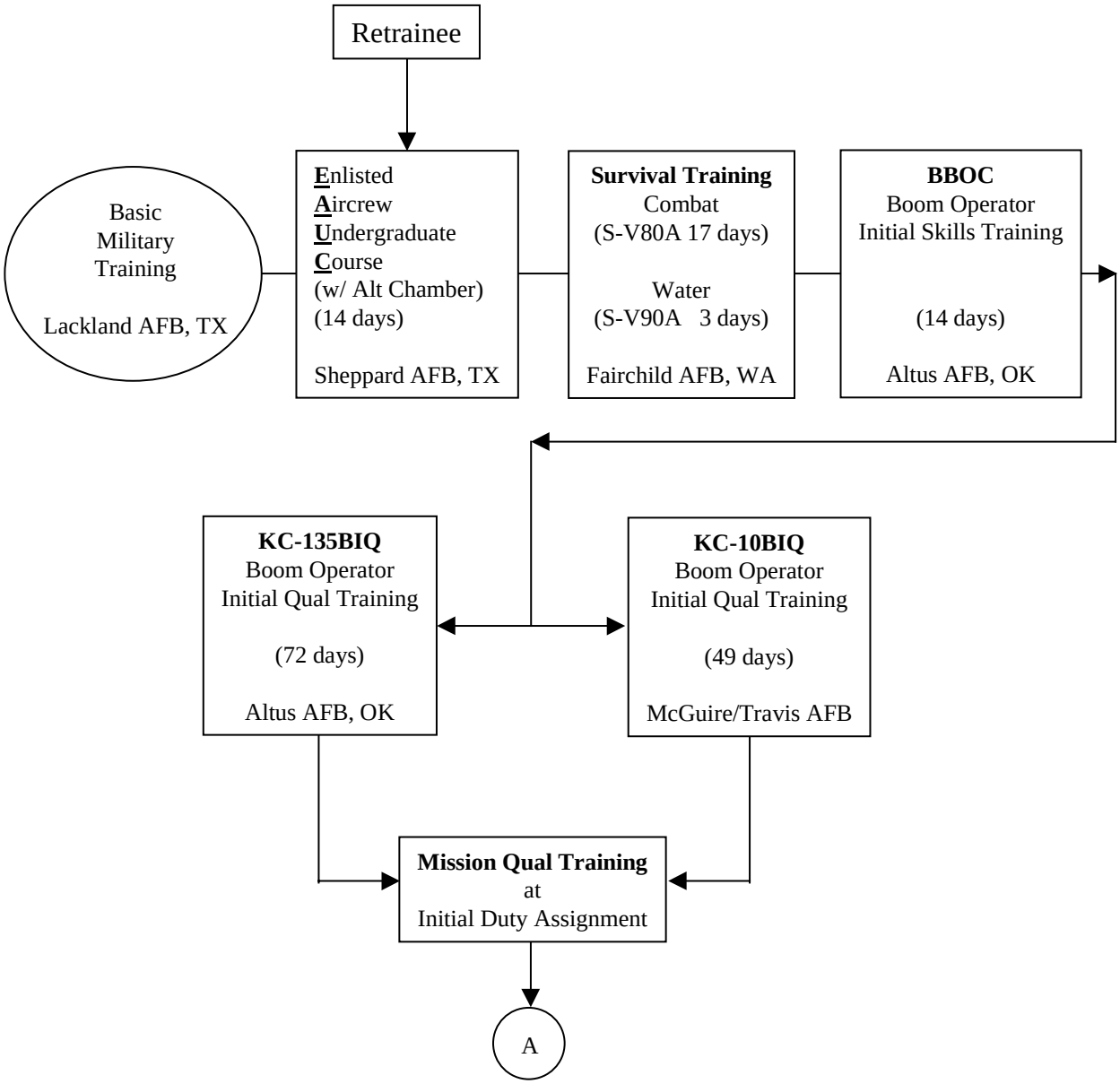
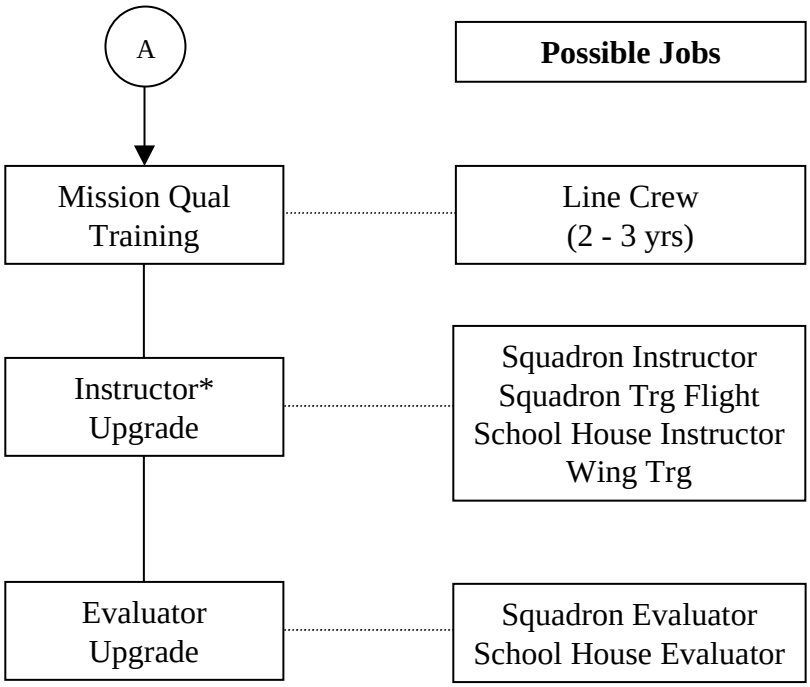


Figure 2

1A0X1 Career Path 2 of 2



*** Instructor Upgrade Flying Hour Requirements**
KC-135: 1500 total / 300 in KC-135 OR
700 total / 500 in KC-135
KC-10: 1500 total / 300 in KC-10 OR
1800 total / 200 in KC-10 with previous KC-135 instructor experience

Ref: 11-2KC135 V1, 1 July 1998 AND 11-2KC10 V1, 1 July 1998

Figure 3

1A0X1 Assignment Locations

Location	CMS	SMS	MSG	TSG	SSG	SRA	A1C	Student
Altus AFB OK	X	X	X	X	X	X		X
Birmingham AL			X					
Davis-Monthan AFB AZ		X						
Dyess AFB TX				X				
Edwards AFB CA			X	X	X			
Fairchild AFB WA	X	X	X	X	X	X	X	
Ft Dix NJ			X					
Grand Forks AFB ND	X	X	X	X	X	X	X	
Hickam AFB HI			X	X				
Holloman AFB NM			X	X	X	X		
Incirlik AB TUK			X					
Iriving TX			X					
Kadena AB JPN	X	X	X	X	X	X	X	
Langley AFB VA	X							
Little Rock AFB AR			X	X	X			
MacDill AFB FL		X	X	X	X	X	X	
McClellan AFB CA					X			
McConnell AFB KS	X	X	X	X	X	X	X	
McGuire AFB NJ	X	X	X	X	X	X	X	X
Mountain Home AFB ID		X	X	X	X	X	X	
Offutt AFB NE		X	X	X	X	X		
RAF Mildenhall UK			X	X	X	X		
Ramstein AB GER			X	X	X			
Randolph AFB TX	X	X						
Robins AFB GA		X	X	X	X	X	X	
Scott AFB IL	X	X	X	X				
Sheppard AFB TX						X		X
Tinker AFB OK		X	X	X				
Travis AFB CA	X	X	X	X	X	X	X	X
NOTE: This table is current as of the printing date. Changes may occur.								

Figure 4

Section C - Skill Level Training Requirements

9. Purpose. Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

10. Specialty Qualifications:

10.1 **Apprentice Level Training**:

10.1.1. **Specialty Qualification**.

10.1.1.1. **Knowledge**. Knowledge is mandatory of: electrical and mechanical principles applying to aircraft and related systems; flight theory; aircraft electrical, hydraulic, and pneumatic systems applying to in-flight refueling system; basic and celestial navigation procedures; preparing and using navigational charts; normal and emergency operation of aircraft refueling systems; flying directives; weight and balance factors; cargo tie-down techniques; minor in-flight maintenance; using personal equipment and oxygen; communication and aircraft emergency procedures; and using and interpreting diagrams, loading charts, technical publications, and flight manuals.

10.1.1.2. **Education**. For entry into this specialty, completion of high school with courses in physics and mathematics is desirable.

10.1.1.3. **Training**. For award of AFSC 1A031, completion of the Basic Boom Operator Course is mandatory. Completion of the Enlisted Aircrew Undergraduate Course is a prerequisite for attending the Basic Boom Operators Course (N/A ARC).

10.1.1.4. **Experience**. No additional experience required.

10.1.1.5. **Other**. The following qualifications are mandatory as indicated:

10.1.1.5.1. For entry, award, and retention of this AFSC:

10.1.1.5.2. Physical qualification for in-flight refueling operation duty according to AFI 48-123, *Medical Examination and Standards.*

10.1.1.5.3. Qualification for aviation service according to *AFI 11-401, Aviation and Parachutist Service, Aeronautical Ratings and badges*.

10.1.1.5.4. For award and retention of AFSC 1A031, eligibility for a Top Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.1.2. **Training Sources and Resources**. Completion of: Combat Survival Training Course S-V80-A, Water Survival Training (Non-parachuting) Course S-V90-A, and Basic Boom Operator Course (BBOC) at Altus AFB, OK, satisfies the knowledge and training requirements specified in the specialty qualification section for award of the 3-skill level.

10.1.3. **Implementation**. Entry into training is accomplished through initial accession from Basic Military Training School or through retraining in from any eligible AFSC. After graduation, mission qualification training starts when an individual is assigned to their first duty position.

10.2. **Journeyman Level Training:**

10.2.1. **Specialty Qualification**.

10.2.1.1. **Knowledge**. Knowledge is mandatory of electrical and mechanical principles applying to aircraft and related systems; flight theory, aircraft electrical, hydraulic, and pneumatic systems applying to in-flight refueling systems; navigation procedures, navigational charts, normal and emergency operation of aircraft refueling systems; flying directives, weight and balance factors; cargo tie-down techniques; minor in-flight maintenance; using personal equipment and oxygen; communication and aircraft emergency procedures; and using and interpreting diagrams, loading charts, technical publications, and flight manuals.

10.2.1.2. **Education.** No additional requirements for entry into this skill level.

10.2.1.3. **Training.** Completion of the following training is mandatory for the award of the 5-skill level:

10.2.1.3.1. Completion of the 5-skill level CDC.

10.2.1.3.2. Completion of the resident and informal training for the assigned weapon system.

10.2.1.3.3. Training must meet core task requirements established in the STS.

10.2.1.4. **Experience**. Qualification in and possession of AFSC 1A031. Also, experience performing functions such as: inspecting, operating, and troubleshooting in-flight refueling systems; preparing loading plans; loading and unloading aircraft; and instructing passengers in the use of emergency equipment and procedures.

10.2.1.5. **Other**. The following qualifications are mandatory as indicated:

10.2.1.5.1. For entry, award, and retention of this AFSC:

10.2.1.5.2. Physical qualification for in-flight refueling operation duty according to AFI 48-123, *Medical Examination and Standards.*

10.2.1.5.3. Qualification for aviation service according to *AFI 11-401, Aviation and Parachutist Service, Aeronautical Ratings and badges.*

10.2.1.5.4. For award and retention of AFSC 1A051, eligibility for a Top Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.2.2. **Training Sources and Resources**. Completion of CDC 1A051 and qualification training, satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 5-skill level.

10.2.3. **Implementation**. Entry into skill level upgrade training is initiated when the individual possesses the 3-skill level. Qualification training is initiated any time an individual is assigned duties they are not qualified to perform.

10.3. **Craftsman Level Training:**

10.3.1. **Specialty Qualification**.

10.3.1.1. **Knowledge**. In addition to the 5-skill level and other qualifications as listed above, an individual must possess the knowledge and skills necessary to supervise personnel.

10.3.1.2. **Education**. To assume the grades of SSgt and MSgt, individuals must be graduates of the Airman Leadership School (ALS) and NCO Academy, respectively.

10.3.1.3. **Training**. Complete a minimum of 18 months in 7-level OJT. The CSAF has approved a variance eliminating the requirement for in-residence, 7-skill level, training for all 1AXXX (Air Operations career field personnel).

10.3.1.4. **Experience**. Qualification in and possession of AFSC 1A051. Also, experience performing or supervising functions such as: inspecting, operating, and troubleshooting in-flight refueling systems; preparing loading plans; loading and unloading cargo on aircraft; and instructing passengers in the use of emergency equipment and procedures.

10.3.1.5. **Other**. The following qualifications are mandatory as indicated:

10.3.1.5.1. For entry, award, and retention of AFSC 1A071:

10.3.1.5.2. Physical qualification for in-flight refueling operation duty according to AFI 48-123, *Medical Examination and Standards.*

10.3.1.5.3. Qualification for aviation service according to *AFI 11-401, Aviation and Parachutist Service, Aeronautical Ratings and badges.*

10.3.1.5.4. For award and retention of AFSC 1A071, eligibility for a Top Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.3.2. **Training Sources and Resources**. The STS identifies the core tasks required for qualification in an individual's duty position.

10.3.3. **Implementation**. Entry into OJT is initiated when an individual has obtained the necessary rank (SSgt) and skill level.

10.4. **Superintendent Level Training**:

10.4.1. **Specialty Qualification**.

10.4.1.1. **Knowledge**. In addition to the 7-skill level qualification. The 9-skill level individual must be an effective leader of personnel and manager of assigned resources. Completion of qualification criteria in currently assigned aircraft is mandatory.

10.4.1.2. **Education**. Resident graduate (active duty only) of Senior Non-Commissioned Officer Academy (SNCOA) or sister service equivalent. Completion of CCAF degree is desired.

10.4.1.3. **Training**. Assumption of the rank of SMSgt is mandatory for award of the 9-skill level AFSC, 1A091. Continuation Training courses are available and attendance should be used based on the individual's training needs and in accordance with AFIs.

10.4.1.4. **Experience**. Qualification in and possession of AFSC 1A071. Also, experience in directing functions pertaining to in-flight refueling activities. Experience in the management of aircrew operations and aircraft systems is mandatory. Additionally, experience is mandatory in the performance of supervisory and management functions.

10.4.1.5. **Other**. The following qualifications are mandatory as indicated:

10.4.1.5.1. For entry, award, and retention of AFSC 1A091:

10.4.1.5.2. Physical qualification for in-flight refueling operation duty according to AFI 48-123, *Medical Examination and Standards.*

10.4.1.5.3. Qualification for aviation service according to *AFI 11-401, Aviation and Parachutist Service, Aeronautical Ratings and badges.*

10.4.1.5.4. For award and retention of AFSC 1A091, eligibility for a Top Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.4.2. **Training Sources and Resources**. The STS identifies all tasks required for qualification in the individual's duty position. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training is contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

10.4.3. **Implementation**. Entry into upgrade training is initiated when an individual possesses the 7-skill level and is in the grade of SMSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs will be completed to be awarded the 9-skill level.

Section D - Resource Constraints

11. Purpose. This section identifies known resource constraints which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be reviewed and updated at least annually.

12. Apprentice Level Training:

12.1. **Constraint**. Boom Operator Part Task Trainers (BOPTT). The two trainers at Altus are 17 and 20 years old respectively. They are rapidly becoming logistically non-supportable and presently provide marginal effectiveness as a procedural trainer. Additional training requirements requested by HQ AMC and in support of international training require more supportable and modernized simulators. These simulators require greater visibility enhancement for actual contact accomplishment with receiver aircraft, include capability for mission distributive training, and capability for long term system upgrades.

12.1.1. **Resources Required**. Funding to obtain two Boom Operator Weapon Systems Trainers (BOWST). Previously presented in both the FY00 POM and FY01 APOM, neither was considered due to budgetary constraints and POM consideration guidance. (AETC/DOFM)

12.1.2. **Action Required**. Pursue funding source for two BOWSTs for KC-135 Boom Operator training at Altus AFB OK. Note: HQ/USAF/XOOT coordinated on the Operations Requirement Document (ORD) supporting AETC's efforts to upgrade and replace the out-of-date BOPTT equipment.

12.2. **OPR and Target completion Date**. AETC/DOFM, CMSgt Carrier. Completion date: Unknown at present time.

13. Journeyman Level Training: None identified.

14. Craftsman Level Training: None identified.

Part II

Section A - Specialty Training Standard

1. Implementation. This STS will be used for technical training provided by AETC for classes beginning **1 July 1999.**

2. Purpose. As prescribed in AFI 36-2201, this STS:

2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3-, 5-, and 7-skill level AFSC in the In-flight Refueling ladder of the Aircrew Operation Career Field. These are based on an analysis of the duties in AFMAN 36-2108. *Items in column 1 with an asterisk (*) are the tasks/knowledge items that are trained in the resident wartime course.* Column 2 (Core Tasks) identifies, by asterisk (*), 5-skill level core tasks.

2.2. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training (in Course KC135B (PDS CodeVC2) described in AFCAT 36-2223) and the career knowledge provided by the correspondence course. There is no advanced course. See ECI/AFSC/CDC listing maintained by the unit OJT manager for current CDC listings.

2.3. Provides certification for OJT. Column 4 is used to record completion of task and knowledge training requirements. Certification is accomplished as outlined in AFI 36-2201.

2.4. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.5. Becomes a job qualification standard for on-the-job training and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct use of procedures.

2.6. Is a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on study references listed in the WAPS study catalog. Individual responsibilities are in AFI 36-2605.

3. Recommendations. Report unsatisfactory performance of individual course graduates for the BBOC to *HQ AMC AOS/Det 2, 510 North 6th Street Suite 2, Altus AFB OK 73523-5053.* CDC unsatisfactory performance and questions should be directed to Extension Course Institute, OAS/EICA, 50 South Turner Blvd., Maxwell AFB, Gunter Annex, AL 36118-5643. Report inadequacies of this STS through command channels to HQ AETC/DOFM and 97 OSS/OST OPR. Reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE
OFFICIAL

2 Attachments
1. Specialty Training Standard
2. Qualitative Requirements

THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY		
NAME OF TRAINEE		
PRINTED NAME *(Last, First Middle Initial)*	INITIALS *(Written)*	SSAN

PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS	
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I

QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The Individual
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
*TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step by step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
**SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

EXPLANATIONS

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

\- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.

x This mark is used alone in course columns to show that training is required but not given due to limitations in resources.

Attachment 1

Users are responsible for annotating training references (TR) to identify current references pending STS revision

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
1. CAREER LADDER PROGRESSION TR: AFMAN 36-2108	*									
1.1. Progression in AFSC 1A0X1		-			A					
1.2. Duties of AFSC 1A031/51/71		-			A					
1.3. Overview of AFSCs 1AXXX		-			A					
1.4. Total Force		-			A					
1.5. Boom Operator/Aerial Refueling History		A			A					
1.6 Terms and Definitions		B								
2. SECURITY TR: AFPD 10-11, AFI 10-1101	*									
2.1. Communications Security (COMSEC) Relating to AFSC 1A0X1		-								
2.1.1. Classifying information		-			A					
2.1.2. Prevention of security violations		-			A					
2.1.3. Use MAJCOM/SOA EEFI's		-			A					
2.1.4. Observe security precautions		-			A					
2.2. Operations Security (OPSEC) Relating to AFSC 1A0X1 TR: AFPD 10-11, -1101		-								
2.2.1. Definition of OPSEC		-			A					
2.2.2. History of OPSEC		-			A					
2.2.3. Common OPSEC vulnerabilities		-			A					
2.2.4. OPSEC significance of unclassified data and procedures		-			A					
2.3. Computer Security (COMPUSEC) TR: AFI 33-202		-			-					
3. AIRCRAFT GENERAL SAFETY TR: AFI 91-301 and 91-302										
3.1. High Intensity Sound		B			A					
3.2. Engine Intake and Exhaust Areas		B			-					
3.3. Weather		B								
3.3.1. Ground Operations TR: AFI 11-218		B			-					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
3.3.2. Flight Operations TR: AFI 11-202, Vol 3, AFI 11-401		B			-					
3.4. Aircraft Fire Extinguisher Availability/Use		B			-					
3.5. Electrical Equipment		B			-					
3.6. Powered Surfaces and Equipment		B			-					
3.7. Air Force Occupational Safety and Health Program (AFOSH) TR: AFI 91-301 and 91-302										
3.7.1. Observe Safety Precautions		-			-					
3.7.2. Thermal Radiation Protection		-			-					
3.7.3. Aircraft Ground Handling		-			-					
3.7.4. Antenna Radiation		-			A					
3.7.5. Reporting Procedures TR: AFI 91-204		-			B					
* 4. TECHNICAL ORDERS AND PUBLICATIONS TR: AFI 11-215, AFI 37-160 and T.O. 00-5-1	*									
* 4.1. Flight Publications		2b			B					
* 4.2. Associated Directives		2b			B					
4.3. Recommend Changes to Technical Orders		A			B					
4.4. Maintain Flight Publications		-			B					
4.5. Initiate Flight Publications Improvement Reports		-			B					
4.6. Use Flight Crew Information File (FCIF)		2b			B					
4.7. Use Standard Publications		-			B					
5. TRAINING TR: AFI 36-2201, -2202, -2204, and MAJCOM Instructions										
5.1. Plan and Supervise Training Programs		-			B					
5.2. Conduct Upgrade Training		-			B					
5.3. Maintain Flight Training Records		-			B					
6. FLIGHT MANAGEMENT TR: AFIs 11-202 Vols 1, 2, 3, & 11-2KC135, Vols 1, 2, 3										
6.1. Flight Authorization		A			-					
6.2. Responsibilities of HHQ		-			-					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
6.3. Functions of Host Operation System		-			A					
6.4. Aircrew Training Program TR: AFI 11-202, Vol 1, 11-2KC-135, Vol 1, 11-2KC-10, Vol 1, AFI 11-401										
6.4.1. Initial Qualification		A			-					
6.4.2. Mission Qualification		A			B					
6.4.3. Continuation Training		A			B					
6.4.4. Instructor Upgrade		A			B					
6.5. Aircrew Standardization/Evaluation Program TR: AFI 11-202 Vol 2 and 11-2MDS, Vol 2										
6.5.1. Evaluation Form (AF Form 8)		A			B					
6.5.2. Flight Evaluation Folder (FEF)		A			A					
6.6. General Flight Rules TR: AFI 11-202, Vol 3, AFI 11-2KC-135 Vol 3, 11-2KC-10, Vol 3, AFI 11-401,		-								
6.7. Aviation Categories, Pay and Badges TR: AFI 11-402, DOD PM		-			B					
7. COMMUNICATIONS TR: TBD										
7.1. General		B								
7.2. EMCON TR: AFI 33-203		B								
8. CREW RESOURCE MANAGEMENT TR: AFI 11-290										
8.1. History		B								
8.2. Terms and Definitions		B								
9. NAVIGATION TR: AFMAN 11-208, AFMAN 11-230, AFM 55-9, AFPAM 11-216, AFI 11-401										
9.1. Mission Planning		B								
9.2. TERPS										
9.2.1. Fundamentals of Chart Reading		B								
9.2.2. SIDS, FLIPS, NOTAM, and TCN		B			B					
9.2.3. Approach Plates		B			B					
9.2.4. Enroute Terminal Charts		B			B					
9.2.4.1. Enroute Procedures		-			A					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
9.2.5. Approach/Departure Monitoring		B			B					
9.2.6. Position Orientation		B			B					
9.2.7. Formation/Cell Procedures		-								
9.2.7.1. Formation Types		-								
9.2.7. Rendezvous Procedures		-			B					
9.2.8. Sextant Operation (KC-135)		-								
10. AIRCRAFT AND EQUIPMENT RECORDS TR: T.O. 00-20 Series										
10.1. Aircraft Forms		A			B					
10.2. Equipment Inventories		A			A					
10.3. Weight and Balance Records/Forms TR: T. O. 1-1B-40, -50		A			A					
11. AEROSPACE GROUND EQUIPMENT TR: Applicable T.O.s										
11.1. Operate Auxiliary Electrical Generating Equipment		-			A					
11.2. Operate Auxiliary Environmental Equipment		-			A					
11.2.1. External air supplies		-			A					
11.2.2. Lighting units		-			A					
11.3. Use Aircraft Support Equipment		-								
11.3.1. Wheel chocks					-					
11.3.2. Landing gear safety pins		-			-					
11.3.3. Maintenance stand		-			A					
11.3.4. Ground wires		-			-					
11.3.5. Fire extinguishers		-			A					
11.4. Ground Servicing TR: T. O. 00-25-172		-								
12. AIRCRAFT GENERAL/GROUND OPERATIONS TR: AFI 11-218, T.O.s for applicable MDS										
12.1. Check Forms for Status of Aircraft and Equipment		-								
12.1.1. Minimum equipment list (MEL)		-			B					
12.1.2. Determine aircraft configuration		-			-					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
12.2. Perform Aircraft Preflight		-			-					
12.3. Operate Doors and Hatches		-			-					
12.3.1. Normal procedures		-			-					
12.3.2. Emergency procedures		-			-					
12.4. Operate the Auxiliary Power Unit (APU)		-			-					
12.5. Establish Electrical Power		-			-					
12.6. Establish Air Conditioning / Heating		-			-					
12.7. Perform Comm Equipment Check		-			-					
12.8. Check Crew / Passenger Support Equipment and Facilities		-			-					
12.9. Perform Ops Check of Oxygen System		-			-					
12.10. Inspect Oxygen Equipment		-			-					
12.11. Check for Emergency Equipment		-			-					
12.12. Operate Lighting Systems		-			-					
12.13. Check Air Refueling Station		-			-					
12.14. Use of Personal Equipment		-			-					
12.15. Aircraft Marshaling TR: AFI 11-218		-			-					
13. ASSOCIATED SYSTEMS TR: T.O.s for Applicable Systems										
13.1. Flight Controls/Aerodynamics		A			B					
13.2. Landing Gear		-			B					
13.3. Pilot's Instrument and Controls		A			A					
13.4. Fuel Systems		A			B					
13.5. Hydraulic Systems		A			B					
13.6. Electrical Systems		A			B					
13.7. Pneumatic Systems		A			B					
13.8. Jet Engines					A					
14. AIRLIFT/CARGO OPERATIONS TR: Applicable AFIs										
14.1. Perform Load Planning					B					
14.2. Material Handling Equipment		B			-					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
14.2.1. Handling Equipment Marshaling		B			-					
14.2.2. 463L Pallet Equipment		B			-					
14.2.3. Aircraft Static Grounding TR: T. O. 00-25-172		B			-					
14.3. Passenger Handling		2b			-					
14.4. Hazardous Materials										
14.4.1. AFJMAN 24-204		B			-					
14.4.2. Verify Hazardous Materials for Air Shipment		-			B					
14.4.3. Special Handling Procedures		-			B					
14.4.4. In-flight Procedures		-			B					
14.4.5. Perform Descent/Before Landing Procedures					-					
14.4.6. Perform After Landing/Parking Procedures					-					
14.4.7. Perform Off-Loading Procedures					-					
14.5. Customs and Border Clearance		B			B					
14.6. Support Agencies		A			A					
14.7. AMOG		-			A					
14.8. TACC		-			A					
14.9. Mission Types		-			A					
14.10. Anti-Hijacking/Terrorism TR: AFI 13-207		B			B					
15. WEIGHT AND BALANCE TR: T. O. 1-1B-40, -50										
15.1. Principles		B								
15.2. Effects of Weight and Balance		-			B					
15.3. Computations		2b								
15.4. Aircraft Configurations		B								
16. IN-FLIGHT AIR REFUELING OPERATIONS TR: T. O. 1-1C-1 and T. O. 1-1C-1-3										
16.1. Types Of Refueling										
* 16.1.1. Centerline Boom		B								
16.1.2. Probe and Drogue		B								

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
16.2. Terms and Definitions		B								
16.3. EMCON Procedures		B								
16.4. Aerodynamic Effects of the Boom		B								
16.5. Communications		B								
17. AIR REFUELING HYDRAULIC, ELECRICAL, AND FUEL DISTROBUTION SYSTEMS										
17.1. Boom Components		-			B					
17.2. Air refueling hydraulic system		-			B					
17.3. Air refueling electrical systems		-			B					
17.4. Air Refueling Fuel System		-			B					
17.5. Perform Air Refueling										
17.5.1. Drogue Air Refueling		-			-					
17.5.1.1. Drogue Adapter Kit Installed (KC-135)		-			-					
17.5.1.2. Centerline procedures (KC-10)		-			-					
17.5.1.2.1. Wing pod procedures		-			-					
17.5.2. Fighter Category Receivers (Day/Night)		-			-					
17.5.2.1. Category I (KC-135) F-117 Night		-			-					
17.5.3. Wide Body (Heavy) Receivers		-			-					
17.5.3.1. Category F (KC-135) C-5		-			-					
17.5.3.2. Category J (KC-135) B-2		-			-					
17.5.3.3. Category K (KC-135) C-17		-			-					
17.6. Perform Air Refueling Receiver Procedures										
17.6.1. KC-10		-			-					
17.6.2. KC-135		-			-					
17.7. Direct Receivers During Air Refueling		-			-					
17.8. Operate In-flight Refueling Systems		-			-					
18. EMERGENCY / ABNORMAL PROCEDURES TR: Applicable T.O.s	*									
18.1. Perform Ground Procedures		-			B					
18.2. Perform In-flight Procedures		-			-					
18.3. Perform Air Refueling Procedures		-			-					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
Summary of Changes This revised STS includes the duties and task proficiency codes incorporated into the newly developed Basic Boom Operator Course (BBOC). The BBOC is now the 1A0XX AFSC awarding course and combines duties and tasks applicable to all KC-XX aircraft. The STS was revised at the 1A0X1 U&TW held at Altus AFB, OK, 17-18 April 1999.										

Section B - Course Objective List

4. Measurement. Each phase of training is considered complete when students achieve the minimum standard for the phase of training being tested or upon completion on the appropriate phase test. Objectives are indicated as follows: **W** indicates task or subject knowledge which is measured using a written test, **PC** indicates required task performance which is measured with a performance progress check, and **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check.

5. Standard. The minimum standard is 85% on each phase test or the End-of course test. Should a student receive less than the minimum acceptable score on any test, the instructor will remediate the student and a second test for that phase will be administered. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

6. Proficiency Level. Most subject knowledge levels are taught to the "B" proficiency level, which means the students can identify relationship of basic facts and state general principles about the subject (Principles). Task knowledge levels are taught to the "2b" proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task (Operating Principles).

7. Course Objective. These objectives are listed in the sequence taught by phase of instruction. Underlined STS elements show where the training is closed-out for the level indicated.

7.1. **Initial Skills Course:**

7.1.1. Phase I.

7.1.1.1. Block A: Terms and Definitions B. Identify relationship of basic facts and state general principles about basic terms and definitions commonly used in the boom operator career field with at least 85 percent accuracy. STS: 1.6. Measure: W

7.1.1.2. Block B: Technical Orders and Publications

7.1.1.2.1. Unit 1, Flight Publications 2b. Given information pertaining to aircraft flight publications and associated directives, student can complete posting changes, supplements, interim changes, with only minimum assistance on the hardest parts (Partially Proficient) and student can determine step by step procedures for doing the task (Procedures) with at least 85 percent accuracy. STS: 4.1 Measure: PC, W

7.1.1.2.2. Unit 2, Associated Directives 2b. Given information pertaining to aircraft associated directives and instructions, student can complete posting supplements, interim changes, with only minimum assistance on the hardest parts (Partially Proficient) and student can determine step by step procedures for doing the task (Procedures) with at least 85 percent accuracy. STS: 4.2 Measure: PC, W

7.1.1.2.3. Unit 3, Recommended Changes to Technical Orders A. Identify basic facts pertaining to the process of recommending changes to technical orders with at least 85 percent accuracy. STS: 4.3 Measure: W

7.1.1.3. Block C: Flight Management

7.1.1.3.1. Unit 1, Flight Authorization A. Identify basic facts pertaining to flight authorization for performing duties on USAF aircraft with at least 85 percent accuracy. STS: 6.1 Measure: W

7.1.1.3.2. Unit 2, Aircrew Training Program A. Identify basic facts pertaining to the aircrew training program, for initial qualification, mission qualification, continuation training, and instructor upgrade training with at least 85 percent accuracy. STS: 6.4.1, 6.4.2, 6.4.3, 6.4.4 Measure: W

7.1.1.3.3. Unit 3, Aircrew Standardization/Evaluation Program A. Identify basic facts pertaining to the aircrew standardization and evaluation program, evaluation forms (Certificate of Aircrew Qualification, AF Form 8), and flight evaluation folders at least 85 percent accuracy. STS: 6.5.1, 6.5.2 Measure: W

7.1.2. Phase II.

7.1.2.1. Block A, Aircraft General

7.1.2.1.1. Unit 1, Safety B. Given information pertaining to general aircraft safety, student can identify relationship of basic facts and state general principles about general personal safety around aircraft. STS: 3.1, 3.2, 3.3, 3.3.1, 3.3.2, 3.4, 3.5, 3.6 Measure: W

7.1.2.1.2. Unit 2, Aircraft Equipment and Records A. Identify basic facts pertaining to aircraft forms and equipment inventories with at least 85 percent accuracy. STS: 10.1, 10.2, 10.3 Measure: W

7.1.2.1.3. Unit 3, Associated Systems A. Identify basic facts pertaining to operation of aircraft associated systems with at least 85 percent accuracy. STS: 13.1, 13.3, 13.4, 13.5, 13.6, 13.7 Measure: W

7.1.2.2. Block B, Weight and Balance

7.1.2.2.1. Unit 1, Principles B. Identify relationship of basic facts and state general principles about aircraft weight and balance with at least 85 percent accuracy. STS: 15.1 Measure: W

7.1.2.2.2. Unit 2, Computations 2b. Given information pertaining to aircraft weight and balance, student can accomplish weight and balance computations with only minimum assistance on the hardest parts (Partially Proficient) and student can determine step by step procedures for doing the task (Procedures) with at least 85 percent accuracy. STS 15.3 Measure: PC, W

7.1.2.2.3. Unit 3, Aircraft Configurations B. Identify relationship of basic facts and state general principles about aircraft configurations with at least 85 percent accuracy. STS: 15.4 Measure: W

7.1.3. Phase III.

7.1.3.1. Block A, Communications B. Identify relationship of basic facts and state general principles about general communication and EMCON procedures used in conjunction with aircraft operations and during actual missions with at least 85 percent accuracy. STS: 7.1, 7.2 Measure: W

7.1.3.2. Block B, Crew Resource Management B. Identify relationship of basic facts and state general principles about the history of crew resource management and associated terms and definitions with at least 85 percent accuracy. STS: 8.1, 8.2 Measure: W

7.1.3.3. Block C, Navigation

7.1.3.3.1. Unit 1, Mission Planning B. Identify relationship of basic facts and state general principles about the mission planning process and items required for aerial flight with at least 85 percent accuracy. STS: 9.1 Measure: W

7.1.3.3.2.7. Unit 2, TERPS B. Identify relationship of basic facts and state general principles about navigational charts, SIDs, FLIPs, NOTAMs, TCN, approach plates, and approach/departure

monitoring and basic position orientation with at least 85 percent accuracy. STS: 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5, 9.2.6, Measure: W

7.1.4. Phase IV.

7.1.4.1. Block A: Airlift Operations

7.1.4.1.1. Unit 1, Cargo Operations B. Identify relationship of basic facts and state general principles about material handling equipment , 463L pallet equipment, aircraft static grounding, and marshaling handling equipment used during cargo operations with at least 85 percent accuracy. STS: 14.2, 14.2.1, 14.2.2, 14.2.3 Measure: W

7.1.4.1.2. Unit 2, Passenger Handling 2b. Given information pertaining to passengers, student can accomplish required passenger handling requirements with only minimum assistance on the hardest parts (Partially Proficient) and student can determine step by step procedures for doing the task (Procedures) with at least 85 percent accuracy. STS: 14.3 Measure: PC, W

7.1.4.1.3. Unit 3, Hazardous Materials B. Identify relationship of basic facts and state general principles pertaining to hazardous materials and information in AFJMAN 24-404 with at least 85 percent accuracy. STS: 14.4, 14.4.1 Measure: W

7.1.4.1.4. Unit 4, Customs and Border Clearance B. Identify relationship of basic facts and state general principles pertaining to customs and border clearance for aircraft arriving and departing from United States or Foreign countries with at least 85 percent accuracy. STS: 14.5 Measure: W

7.1.4.1.5. Unit 5, Support Agencies A. Identify basic facts and terms pertaining to support agencies for cargo operations with at least 85 percent accuracy. STS: 14.6 Measure: W

7.1.4.1.6. Unit 6, Anti-Hijacking/Terrorism B. Identify relationship of basic facts and state general principles pertaining to the prevention and resistance of anti-hijacking and terrorism with at least 85 percent accuracy. STS: 14.10 Measure: W

7.1.4.2. Block B: Air Refueling

7.1.4.2.1. Unit 1, Types of Refueling B. Identify relationship of basic facts and state general principles about boom and drogue aerial refueling with at least 85 percent accuracy. STS: 16.1.1, 16.1.2 Measure: W

7.1.4.2.2. Unit 2, Terms and Definitions B. Identify relationship of basic facts and state general principles about basic terms and definitions commonly used during air refueling operations with at least 85 percent accuracy. STS: 16.2 Measure: W

7.1.4.2.3. Unit 3, EMCON Procedures B. Identify relationship of basic facts and state general principles pertaining to the usage and limitations of electronic emissions during air refueling operations with at least 85 percent accuracy. STS: 16.3 Measure: W

7.1.4.2.4. Unit 4, Aerodynamic Effects of the Boom B. Identify relationship of basic facts and state general principles pertaining to the effects the air refueling boom has on both tanker and receiver aircraft with at least 85 percent accuracy. STS: 16.4 Measure: W

7.1.4.2.5. Unit 5, Communications B. Identify relationship of basic facts and state general principles pertaining to communications procedures used during aerial refueling with at least 85 percent accuracy. STS: 16.5 Measure: W

Section C - Support Material

8. ***NOTE:*** There are currently no support material requirements. This area is reserved.

Section D - Training Course Index

9. Purpose. This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field Training programs10. Air Force In-Residence Courses. **NOTE: Refer to AFCAT 36-2223, USAF Formal Schools, for information on all courses in this index.**

COURSE NUMBER	COURSE TITLE	LOCATION
J3AQR11010 000	Enlisted Aircrew Undergraduate Course	Sheppard AFB
S-V80-A	Combat Survival Training	Fairchild AFB
S-V86-A	Water Survival Training	Pensacola NAS
S-V90-A	Water Survival Training (non-parachuting)	Fairchild AFB
BBOC	Basic Boom Operator Course	Altus AFB
KC-135BIQ	KC135 Boom Operator Initial Qualification Course	Altus AFB
KC-135BRQ	KC135 Boom Operator Requalification	Altus AFB
KC-135IB	KC135 Instructor Boom Operator Upgrade	Altus AFB
KC-135IBS	KC135 Instructor Boom Operator short Course (Air National Guard and Reserves)	Altus AFB
KC-135 BFTC	KC135 Boom Operator Faculty Training Course	Altus AFB
KC-10B	KC-10 Boom Operator Initial Qualification Training	Travis/McGuire
KC-10IC	KC-10 Boom Operator Instructor Upgrade Course	Travis/McGuire
KC-10BRQ	KC-10 Boom Operator Requalification	Travis/McGuire

11. **Extension Course Institute (ECI) Courses.**

COURSE NUMBER	COURSE TITLE
CDC 1A051	In-flight Refueling Operator Journeyman

12. Other Courses in the Field. Currently no other courses are identified. This area is reserved

13. Courses under Development/Revision

COURSE NUMBER	COURSE TITLE	LOCATION
BBOC	Basic Boom Operator Course	Altus AFB
KC-135BIQ	KC135 Boom Operator Initial Qualification Course	Altus AFB

KC-10B	KC-10 Boom Operator Initial Qualification Training	Travis/McGuire

Section E - MAJCOM Unique Requirements

14. Boom Operators are required to complete initial and recurring training events for their primary assigned aircraft. Refer to Air Force Instructions, MAJCOM, and Multi-Command series instructions for additional information on these requirements. Additionally, to maintain qualification and proficiency, boom operators will accomplish the flying currency requirements identified in applicable AFIs as supplemented by MAJCOMs.

NOTE: There are currently no MAJCOM unique requirements. This area is reserved.